

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 10/05/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/809,906	03/26/2004	Rahul Surana	008089 7260 USA/MTCG/PCTRL			
7:	590 10/05/2006		EXAMINER			
Applied Materials, Inc.			MCDONALD, SHANTESE L			
P.O. Box 450A Santa Clara, C.		·	ART UNIT	PAPER NUMBER		
Santa Ciara, Ci	A 95052		3723			

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No.	1	Applicant(s)			
			10/809,906		SURANA ET AL.			
Office Action Summary			Examiner		Art Unit			
			Shantese L. McDonald		3723			
Period fo	The MAILING DATE of this community or Reply	nication appe	ears on the cover sheet	with the co	orrespondence ad	ddress		
WHIC - Exte after - If NC - Failt Any	IORTENED STATUTORY PERIOD IN CHEVER IS LONGER, FROM THE INCREMENT IN THE I	MAILING DA's of 37 CFR 1.136 munication. statutory period will y will, by statute, of	TE OF THIS COMMUN 6(a). In no event, however, may I apply and will expire SIX (6) MC cause the application to become.	ICATION a reply be time ONTHS from to	ely filed he mailing date of this o			
Status								
1)	Responsive to communication(s) fil	ed on 13 Juli	v 2006					
- '=			<u> </u>					
3)	This action is FINAL . 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims		•	·	•			
4)□	Claim(s) 1-44 is/are pending in the	application						
-,-	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
·	Claim(s) 1-44 is/are rejected.	•						
	Claim(s) is/are objected to.							
	Claim(s) are subject to restri	ction and/or	election requirement.		•	•		
Applicat	ion Papers							
9)□	The specification is objected to by the	ne Examiner.						
•	The drawing(s) filed on is/are			o bv the E	xaminer.	•		
,	Applicant may not request that any obje			=				
	Replacement drawing sheet(s) including					FR 1.121(d).		
11)[The oath or declaration is objected t	o by the Exa	miner. Note the attache	ed Office	Action or form P	TO-152.		
Priority ı	under 35 U.S.C. § 119							
12)	Acknowledgment is made of a claim	for foreign p	oriority under 35 U.S.C.	§ 119(a)-	·(d) or (f).			
	☐ All b)☐ Some * c)☐ None of:	5 1		3 ()	(-) - (-)-			
·	1. Certified copies of the priority	documents	have been received.			·		
	2. Certified copies of the priority			Applicatio	on No			
	3. Copies of the certified copies		•			Stage		
	application from the Internation	onal Bureau	(PCT Rule 17.2(a)).			•		
* 5	See the attached detailed Office action	on for a list o	f the certified copies no	ot received	d.			
			•					
Attachmen	t(s)							
_	e of References Cited (PTO-892)		4) Interview	/ Summary (PTO-413)			
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (I	PTO-948)	Paper No	o(s)/Mail Dat	e			
	mation Disclosure Statement(s) (PTO/SB/08) or No(s)/Mail Date		5)	t informal Pa	tent Application			
	· ·		ــ - المارة	<u> </u>				

Application/Control Number: 10/809,906

Art Unit: 3723

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Redeker et al.

Redeker et al. teaches a method for qualifying a semiconductor manufacturing tool, by using a computer readable medium, 90, comprising transferring a single patterned wafer to a bulk removal polishing platen, (col. 7, lines 31-63), measuring in situ bulk removal polishing platen characteristics, which include polishing rate, nonuniformity and defectivity, from the wafer during the processing by the bulk removal polishing platen, using an eddy current measuring sensor implemented at the bulk removal polishing platen, (col. 9, lines 57-59), qualifying the bulk removal polishing platen by adjusting one or more parameters of a recipe in accordance with the one or more bulk removal polishing platen characteristics, (col. 10, lines 46-61). Redeker et al. also teaches transferring the wafer to a copper clearing platen, measuring in situ, using a laser interferometer, (col. 8, lines 57-65 and col. 11, lines 19-20), copper clearing platen qualification characteristics from the wafer during processing by the copper

Art Unit: 3723

clearing platen, and qualify the copper clearing platen by adjusting one or more parameters of the recipe, (col. 10, line 62-col. 11, line 54), and transferring a wafer to a barrier removal polishing platen, measuring in situ, using an optical sensor, (col. 11, lines 64-65), barrier removal platen qualification characteristics and qualifying the barrier removal polishing platen by adjusting one or more parameters of the recipe, (col. 11, lines 55-67). Redeker also teaches measuring in situ a defectivity from the wafer and qualifying the tool for the defectivity by adjusting one or more parameters of the recipe, (col. 10, lines 13-34), and using the recipe in the processing of one or more subsequent wafers by at least each of the bulk removal polishing platen, the copper clearing platen and the barrier removal polishing platen, (col.2, lines 26-43 of 09/609,426 which is US 6,776,692 which was incorporated by reference as stated in col. 10, line 24 of Redeker).

Response to Arguments

Applicant's arguments filed 7/13/06 have been fully considered but they are not persuasive.

The Applicant argues that Redeker fails to teach one or more parameter of a recipe. The Examiner has noted that Redeker incorporates by reference, in col. 10, line 24, case US 6,776,692, which does indeed teach a polishing recipe in col. 2, lines 26-43.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese L. McDonald whose telephone number is (571) 272-4486. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/809,906

Art Unit: 3723

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.L.M. September 19, 2006

Joseph J. Hail, III Supervisory Patent Examiner Technology Center 3700